TNRCC

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RG-31b

Air Program Inspector's Manual

Inspection Preparation Guidelines for Chemical, Petrochemical, and Refining Facilities

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TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

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TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Protecting Texas by Reducing and Preventing Pollution

Re: 1994 SIP Inspection

Dear _. _____: (Plant Manager)

Your company is scheduled for a State Implementation Plan (SIP) inspection during the Texas Natural Resource Conservation Commission (TNRCC) fiscal year (September-August). So that inspection time can be utilized more efficiently, we request that you assemble and have available at your facility the information contained in the attached Investigation Preparation Guidelines (IPG).

While these guidelines have been developed so you may prepare for the SIP inspection, the TNRCC investigator is not limited to the items listed in this document. Any additional information within the scope of applicable regulations may be requested during the inspection.

If you have any questions concerning the IPG, the format of the requested information, or inspection procedures, please feel free to call us.

Sincerely

(signature)
Air Program Manager

Inspection Preparation Guidelines for Chemical, Petrochemical and Refining Facilities

Your facility has been scheduled for its annual SIP inspection sometime this fiscal year. So that we may utilize the inspection time most efficiently it is requested that you assemble and have available the following information. You may be asked to provide this information shortly before the inspection or at the time of the inspection. Copies of all materials, records or spread sheets should be reproduced on standard size paper 8.5 x 11 (or 11 x 17 folded to 8.5 x 11):

a. A list of all units/facilities at your plant and applicable regulations to each unit/facility such as NSPS, NESHAP, TACB Regs etc. For NSPS, NESHAP give listing by subpart.

b. A copy of latest TACB emissions inventory SUMMARY (not full report) and a copy of latest SARA Title III SUMMARY (not full report).

c. An updated process description and a simplified process flow diagram (not block diagrams) for each unit.

d. A list of acronyms.

e. Additional information as described in the following sections:

Section A: Fugitive Emission Monitoring

Section B: Storage Tank Summary

Section C: Loading/Unloading Summary

Section D: Control Devices Summary

Section E: Permit/Facility Summary

Section F: Production Information

Section G: VOC/Water Separation Systems

Section H: Continuous Emissions Monitoring

Section I: Source Management

Section J: Site Specific Questions

It is requested that the following information be readily available for review at the time of the inspection:

a. A "Permit Book" or permit summary file which includes a current copy of all your TACB construction and operating permits and PSD permits.
b. A comprehensive log or summary file of all upset/maintenance notifications submitted to TACB.

c. Records required by "Recordkeeping Requirements" of permits, or state or federal regulations applicable to your facility.

d. Additional information as described under Sections A through I.

While these guidelines are broad in scope, the TNRCC investigator is not limited to the items listed in this document. Any additional information within the scope of the regulations may be requested during the inspection.

Section A
Fugitive Emissions Monitoring

a. Provide the following information concerning your fugitive emissions monitoring programs:

   1. A comprehensive listing of the units monitored for fugitive emissions and the specific program applicable to each unit. For example:

      + NSPS Subpart VV
      + NESHAP Subparts J/V
      + 28M, 28MD or 28MID required by permit XXXX
      + Regulation V for SOCMI and petroleum refineries
      + Other (describe)

   2. A listing of identification numbers of all instruments used in your fugitive monitoring program.

b. Have the following information readily available for review:

   1. Fugitive monitoring records.

   2. Calibration data and other records, as necessary, to demonstrate compliance with Method 21 and other calibration requirements.

   3. A list and monitoring plan (if applicable) of all valves designated "unsafe or difficult to monitor."

   4. Detailed schematics of the closed vent systems which are operated with no detectable emissions (size 8.5X11 or 11X17).

   5. A listing of components monitored for no detectable emissions.

c. Make available someone who normally conducts fugitive emissions monitoring to conduct monitoring if requested.

Section B
Storage Tank Summary

a. Provide the following information for storage tanks in VOC service, and capacity greater than 7,000 gallons. A tabular format is recommended:

1. Tank identification number.
2. Tank capacity (gallons or barrels).
3. Material in storage.
4. Vapor pressure and percent benzene of material in storage.
5. Temperature at which vapor pressure, under 4 above, is calculated.
6. If storage temperature is other than ambient, specify storage temperature.
7. Construction date (month/year).
8. Reconstruction or modification date if applicable.
9. Tank type:
   - Fixed roof
   - Internal floating roof
   - External floating roof
   - Pressure tank
10. For tanks that vent to a control device, give the name and type of the control device.
11. Specify whether the tank is covered under a permit, standard exemption (SE) or is grandfathered. Give permit number or SE number if applicable.
12. Specify which NSPS, NESHAP and/or Regulation V apply.
13. For tanks that have changed service within the last two years, specify materials stored and time of storage.

b. Selected tanks may be inspected during the SIP investigation.

c. Provide the following additional information for each EXTERNAL FLOATING ROOF TANK IN VOC SERVICE. A tabular format is recommended:

1. Type of primary seal (mechanical shoe, wiper, resilient, inflated tube, foam filled, liquid filled...).

2. Specify whether the primary seal is liquid or vapor mounted.

3. Specify whether the tank is equipped with a secondary seal. If so equipped, specify secondary seal type.

4. If the primary seal is a mechanical design, specify whether the secondary seal is shoe or rim mounted.

5. Give date tank seal(s) were last inspected. Have inspection records readily available for review. If deficiencies were noted during these inspections have repair records readily available for review.

6. Give date when secondary shoe mounted seals were last replaced.

d. Provide the following additional information for each INTERNAL FLOATING ROOF TANK IN VOC SERVICE. A tabular format is recommended:

1. Type of primary seal (mechanical shoe, wiper, resilient, inflated tube, foam filled, liquid filled ...).

2. Specify whether the primary seal is liquid or vapor mounted.

3. Specify whether the tank is equipped with a secondary seal. If so equipped, specify type.

4. Give date tank seals were last inspected. Have inspection records readily available for review. If deficiencies were noted during these inspections, have repair records readily available for review.

e. Provide the following additional information for each PRESSURE TANK IN VOC SERVICE. A tabular format is recommended:

1. Operating pressure in psig.

2. Relief valve setting in psig.

3. State whether safety relief valve vents to the atmosphere or to a control device.

4. If relief valve vents to a control device, identify control device.

f. Provide the following information for each TANK NOT IN VOC SERVICE with a capacity greater than 10,000 gallons. A tabular format is recommended:

1. Tank identification.

2. Construction date.

3. Tank capacity (gallons/barrels).

4. Material in storage.

5. Tank type (fixed roof, external floating roof, internal floating roof, bullet, sphere, etc.).

6. Associated pollution control equipment if installed.

Section C
Loading/Unloading Facilities

Provide the following information regarding your loading/unloading facilities. A tabular format is recommended:

a. Identify all loading/unloading operations (truck, rail car, ship, barge or pipeline) and list materials handled at each location.

b. Specify the number of arms, lines, hoses, and spots for each facility (VOC only).

c. Give the identification number for each arm, line, spot, or hose (VOC only).

d. Specify material and amount (gallons per month) handled by each arm, line, spot, or hose (VOC only). Also indicate if material is being loaded or unloaded.

e. Give vapor pressure for each material handled (VOC only).

f. Use the same material names as in the storage tank summary.

g. Describe the method of emissions control (if any) for each arm, line, spot or hose.

h. Describe method of emissions control for each material. If emissions control is not utilized during loading/unloading operations indicate by the word "none."

Section D
Control Devices Summary

Provide the following information for each control device used to control emissions from equipment such as manufacturing process vents, loading facilities, storage tanks, or other. A tabular format is recommended:

a. Identification and type of control device (flare, incinerator, condenser, scrubber, carbon bed or other adsorption units).

b. Facility being served by the control device.

c. TACB Permit No. (if applicable).

d. Applicable regulations for the control device.

Section E
Permit/Facility Summary

a. Provide a permit/facility summary to include all permitted and grandfathered facilities such as manufacturing units, loading facilities, power plants, storage areas, waste water systems, etc. For example:

Facility Name	Permit/Exemption/Grandfather
1.	
2.	
3.	
4.	
5.	
6.	
7.	

b. **Provide a brief description of your method of compliance with each general and special provision of each permit.**

Section F
Production Information

Provide production data for 1991 and 1992 for each manufacturing unit as follows. This information may be marked as "CONFIDENTIAL."

Product or By Product	1991 (lbs/year)	1992 (lbs/year)	Table 2 (lbs/year)

For permitted units compare your production with the permit representation found in Table 2 of your permit application.

Section G
VOC/Water Separation Systems

Provide the following information for VOC/WATER separation systems at your plant:

a. A simplified description of your voc/water separation system.

b. A simplified flow diagram identifying all voc/water separators and associated tankage (wastewater, slop oil, etc.).

c. Describe emissions control equipment for each of the separators.

d. Include complete storage tank data in Section B - Storage Tank Summary.

Section H
Continuous Emission Monitoring Systems

a. Provide the following information for each continuous emission monitoring system (CEMS) at your plant. A tabular format is recommended:

   1. CEMS identification number.

   2. Piece of equipment being monitored and parameters being monitored. For example:

      + NOx monitor on cogen plant No. 2 stack
      + Refinery fuel gas H2S monitor
      + SO2 monitor on incinerator No. 2 stack
      + Opacity meter on catalyst regenerator stack

   3. Give regulation (permit, TACB Regulation, NSPS...) requiring the installation and operation of CEMS.

   4. Give listing of all testing performed to certify or recertify your CEMS.

b. Have monitoring and calibration data readily available for review.

Section I
Source Management Information

Account No. _____ County _____ Date _____

Company _____

Facility _____

Street/Location _____

Mailing Address _____

City _____ State _____ Zip _____

Parent Corporation _____

Corporation Address _____

City _____ State _____ Zip _____

Corporate CEO _____ Title _____

Plant Manager _____ Title _____

Environmental Contact _____ Title _____

Telephone Number Plant: _____ Headquarters: _____

Principal Business _____

Site Specific Questions